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(54) SEARCH ENGINE WITH
DEMOGRAPHIC-BASED ADVERTISING

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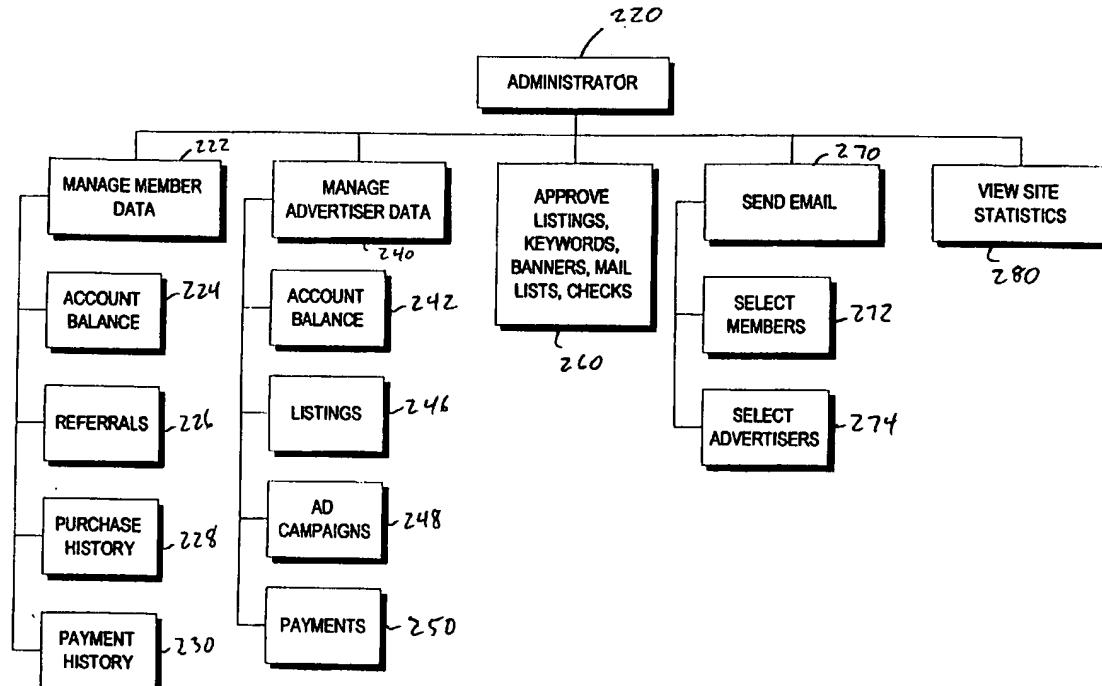
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(57) **ABSTRACT**

A system and method for electronic advertising using a
search engine include providing an incentive to users of the
search engine to become members, collecting demographic
information from users while registering to become a mem-
ber, and associating the demographic information with an
advertisement when a user responds to the advertisement.
The method may also include providing advertisers with
statistical information relative to user demographics for
users who responded to a particular advertisement. In one
embodiment, the member demographics may be used by
advertisers to target particular advertising campaigns to
members based on member demographic information. Like-
wise, demographic information entered by advertisers may
be used by the administrator or other advertisers to target
advertising information to those advertisers using the search
engine. An advertiser determines a target audience based on
selected demographic information and is charged based on
the number of selected members which meet the advertisers
demographic selection criteria. If the advertisement includes
a link to the advertiser, the search engine tracks the response
or click-through rate. Banner ads or text areas on the search
engine website may also be presented based on search terms
entered by a user or member with click-through rates
determined by the search engine.

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ABSTRACT:

A system and method for electronic advertising using a search engine include
providing an incentive to users of the search engine to become members,
collecting demographic information from users while registering to become a
member, and associating the demographic information with an advertisement when
a user responds to the advertisement. The method may also include providing
advertisers with statistical information relative to user demographics for
users who responded to a particular advertisement. In one embodiment, the
member demographics may be used by advertisers to target particular advertising
campaigns to members based on member demographic information. Likewise,
demographic information entered by advertisers may be used by the administrator
or other advertisers to target advertising information to those advertisers
using the search engine. An advertiser determines a target audience based on
selected demographic information and is charged based on the number of selected
members which meet the advertisers demographic selection criteria. If the
advertisement includes a link to the advertiser, the search engine tracks the
response or click-through rate. Banner ads or text areas on the search engine
website may also be presented based on search terms entered by a user or member
with click-through rates determined by the search engine.

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Summary of Invention Paragraph - BSTX (10):

    [0007] A further object of the present invention is to provide a system and
method for charging **advertisers** based on the **advertiser's bid** for placement in
a **search** result listing relative to other **advertisers**.

Summary of Invention Paragraph - BSTX (12):

    [0009] A further object of the present invention is to provide a **search**

engine having a **bid** calculator for **advertisers** to determine an appropriate price for relative placement in a **search** results listing.

Brief Description of Drawings Paragraph - DRTX (9):

[0025] FIG. 8 illustrates operation of a **bid** calculator used to determine a price for placement in a **search** results listing relative to other **advertisers** for a particular keyword according to one embodiment of the present invention;

Detail Description Paragraph - DETX (4):

[0038] The **search** results are displayed with paid **advertisers** arranged in an order corresponding to their **bid** for placement associated with a particular keyword which matches the **search** term. The user then activates or responds to a particular listing by clicking on the associated link which redirects the user to the associated website or computer as represented by block 80. For listings corresponding to paid advertisers as determined by block 78, block 70 determines whether various criteria or charge constraints have been satisfied. The charge constraints or criteria may be used to impose a maximum number of credits for a predetermined time period for each registered visitor. Likewise, members may be limited to a predetermined number of sponsors to a particular advertiser's website in a predetermined period. In one preferred embodiment, members must visit or view the selected website for a predetermined time, such as 20 seconds or more, to receive credit for visiting the advertiser. Similar charge constraints imposed on members may also be imposed for advertisers, i.e. an advertiser account is not charged unless certain criteria or constraints are satisfied. In one preferred embodiment, the advertiser is charged only once for a particular user, whether or not registered, in a particular time period, such as 24 hours. Likewise, advertisers are preferably charged only if a visitor (registered or anonymous) clicks on a listed link and visits the associated website for a predetermined time period, such as 20 seconds or more. For registered visitors or members, the user account is credited and the advertiser account is debited as represented by block 94 if the corresponding charge constraints represented by blocks 90 and 92 are satisfied. For registered users or members, the user demographic information is associated with the advertisers' listing as represented by block 96. The demographic information may be provided to advertisers in the form of summary statistics as described in greater detail below. Preferably, all personal and identifiable information is kept strictly confidential to the search engine and is not provided to the advertisers.

Detail Description Paragraph - DETX (18):

[0052] Advertiser module 100 allows advertisers to add and/or modify keywords associated with each listing as represented by block 150. According to the present invention, each keyword includes an associated bid as represented by blocks 152 and 154. The present invention allows the **advertiser** to choose as many keywords (which are relevant to the listing and subject to administrator approval) and assign a **bid** price for placement in a **search** results list for a particular keyword relative to other **advertisers** and unpaid listings. A bid calculator allows the advertiser to modify bid prices and determine where the listing will appear relative to other listings for a particular keyword as explained in greater detail below. For example, an **advertiser** that selects "computer" as a keyword will find that their current **bid** price of $0.10 will rank their associated website 20.sup.th in the results for a **search** query which matches that keyword. The advertiser is provided the opportunity to increase the bid price for that keyword to appear higher in the results list. Advertisers selecting the same keyword and same bid price are preferably listed so that the first registered advertiser appears higher in the list.

Detail Description Paragraph - DETX (28):

[0062] After the user enters a search term or query and activates the search button, the present invention searches the database of paid advertisers in addition to one or more databases of unpaid listings (which may include one or more other search engines) to provide the results, indicated generally by reference numeral 306. Each listing in response to the search term or query preferably includes a ranking number 308 and associated description text indicated generally by reference numeral 310. According to the present invention, listings sponsored by advertisers are indicated by a special icon 312. This allows the registered visitor or member to determine which listings are sponsored and will result in a credit to the visitor's account provided the corresponding charge constraints are satisfied when the visitor responds to the advertisement or listing by clicking on the associated link 314. The visitor may also determine the relevance of the results based on the description 316. Preferably, the visitor is also provided with cost information 318 which indicates the price the advertiser is willing to pay to the search engine for each visitor which responds to the listing or advertisement. Listings 306 are preferably arranged with listings sponsored by advertisers preceding those which are not sponsored, such as listing 322. In addition, **advertiser** listings are preferably arranged according to the **bid** price entered by the **advertiser** for the particular keyword which matches the **search** term or query entered by the user. For advertisers which bid the same price for the same keyword, listings are preferably arranged based on the order in which the advertisers entered the listings. Of course, other arrangements for listing the results may be provided. In addition, the icon 312 and cost information 318 may be omitted without departing from the spirit or scope of the present invention.

Detail Description Paragraph - DETX (38):

[0072] FIG. 8 illustrates operation of a **bid** calculator used to determine a price for placement in a **search** results listing relative to other **advertisers** for a particular keyword according to one embodiment of the present invention. The bid calculator provides the advertiser with bid information relative to other advertisers for a particular keyword as represented by reference numeral 450. The advertiser may enter a bid for the current keyword in box 452. Clicking the calculate button 458 causes the system to perform a **search** of the database for the keywords 450 and **bid** prices of other **advertisers**. **Bid** prices 454 and associated positions 456 are displayed for the current **bid** and preferably a selected number of **bids** to assist the **advertiser** in selecting an appropriate **bid** for display at a desired position in the **search** list.

Detail Description Paragraph - DETX (52):

[0086] As such, the present invention provides advertisers with demographic statistics relative to users who respond to various types of advertising campaigns. The present invention therefore provides for more targeted advertising so advertising resources can be allocated to those campaigns which reach the intended recipients who responds to the advertisement. The present invention provides an incentive to the users to register as members and provide demographic information which can then be subsequently collected and provided in an anonymous fashion to the advertiser based on those users who respond to particular advertising campaigns. Because the **advertisers** are allowed to select keywords for **search** results listings and associated **bid** prices for relative placement in the results listings, the **advertisers** have more complete control over their **advertising** campaigns. Unlike other methods for advertising, the present invention supplies advertisers with real-time average demographic information for those users responding to their advertisements. The search engine encourages participation by members by rewarding members for

registering and using the search engine based on responses to advertisements.
The search engine preferably does not provide any identifiable personal
information to the advertisers. Rather, personal information is kept strictly
confidential with advertisers provided with only demographic information in an
anonymous fashion.

Claims Text - CLTX (16):

   15. A method for electronic advertising using a search engine for searching
a computer network, the method comprising: collecting demographic information
from users of the search engine; searching a database of **advertiser** listings
with associated keywords and **bid** prices based on **search** terms entered by a
user; displaying **advertiser** listings with keywords matching the **search** terms
in an order based at least on the **bid** prices; and associating a user's
demographic information with an advertiser listing when the user selects the
advertiser listing.

Claims Text - CLTX (28):

   27. A computer readable storage medium having stored data representing
instructions executable by a computer to integrate electronic advertising with
a search engine for searching a computer network, the computer readable storage
medium comprising: instructions for collecting demographic information from
users of the search engine; instructions for searching a database of
advertiser listings with associated keywords and **bid** prices based on **search**
terms entered by a user; instructions for displaying **advertiser** listings with
keywords matching the **search** terms in an order based at least on the **bid**
prices; and instructions for associating a user's demographic information with
an advertiser listing when the user selects the advertiser listing.